In the claims:

      1. – 62. (Canceled)

      63.   (New) An infrared sensor comprising:

      a sensor array comprising multiple IR sensors, for collecting IR energy from an external scene; and

      a sensitivity adjuster associated with said sensor array, for adjusting between a field of view, and a grouping of sensing pixels to derive a required image sensitivity.

      64.   (New) An IR sensor in accordance with claim 63, wherein said sensor array comprises an array of photon detectors.

      65.   (New) An IR sensor in accordance with claim 63, wherein said sensor array comprises an infrared focal plane assembly (IRFPA).

      66.   (New) An IR sensor in accordance with claim 63, wherein said sensitivity adjuster comprises a window selector for selecting a readout window within said array.

      67.   (New) An IR sensor in accordance with claim 63, wherein said sensitivity adjuster comprises a grouping factor selector for selecting a pixel grouping factor during IR energy collection.

      68.   (New) An IR sensor in accordance with claim 63, further comprising a readout element for performing periodic sensor array readout with a readout time variable with a size of a selected readout window.

      69.   (New) An IR sensor in accordance with claim 63, wherein said adjusting is in accordance with externally provided control information.

70.   (New) An IR sensor in accordance with claim 63, further comprising an image processor, for processing a sensor array output signal so as to form a feedback signal for controlling said adjusting.

71.   (New) An IR sensor in accordance with claim 70, wherein said image processor further comprises an SNR detector for detecting an SNR of said image signal.

72.   (New) An IR sensor in accordance with claim 70, wherein said image processor further comprises a contrast detector, for detecting a contrast level of said image signal.

73.   (New) An IR sensor in accordance with claim 70, further comprising a mode selector for switching between a high-sensitivity operating mode and a low-sensitivity operating mode in accordance with said feedback signal.

74.   (New) An IR sensor in accordance with claim 66, further comprising a mode selector for switching between a small readout region and a large readout region, respectively to provide high-sensitivity and low-sensitivity imaging.

75.   (New) An IR sensor in accordance with claim 67, further comprising a mode selector for switching between a large pixel grouping and a small pixel grouping, respectively to provide high-sensitivity and low-sensitivity imaging.

76.   (New) An IR sensor in accordance with claim 63, further comprising a video processor, for processing a sensor array output to form a video image.

77.   (New) A method for IR sensing, comprising:
        adjusting a pixel grouping of a sensor array to provide a required image sensitivity; and
        collecting IR energy over a variable window from an external scene with said sensor array, in accordance with said pixel grouping.

78. (New) A method in accordance with claim 77, further comprising selecting a sensor exposure time.

79. (New) A method in accordance with claim 78, wherein said selecting is to maintain an average collected charge of said sensor at a specified level.

80. (New) A method in accordance with claim 78, wherein said method is performed repetitively at a maximum rate permitted by said pixel grouping and said selected exposure time.

81. (New) A method in accordance with claim 77, further comprising forming a feedback signal for controlling said adjusting in accordance with a readout of said sensor array.

82. (New) A method in accordance with claim 81, wherein said feedback signal comprises at least one of: average image SNR, maximum image SNR, minimum image SNR, average image contrast, maximum image contrast, and minimum image contrast.

83. (New) A method in accordance with claim 77, further comprising averaging respective sensor levels over multiple sensor array readout cycles.

84. (New) A method in accordance with claim 77, further comprising switching between a high-sensitivity operating mode and a low-sensitivity operating mode.

85. (New) A method in accordance with claim 77, further comprising analyzing a video IR image to identify specified properties of interest.